



U.S. Army Research, Development and Engineering Command

**SBIR & STTR**

**ARL**

***TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.***

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**October 18, 2012**

Report Documentation Page				Form Approved OMB No. 0704-0188	
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1. REPORT DATE <b>18 OCT 2012</b>		2. REPORT TYPE		3. DATES COVERED <b>00-00-2012 to 00-00-2012</b>	
4. TITLE AND SUBTITLE <b>SBIR &amp; STTR</b>				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) <b>U.S. Army Research, Development and Engineering Command,US Army Research Laboratory,2800 Powder Mill Road,Adelphi,MD,20783-1197</b>				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT <b>Approved for public release; distribution unlimited</b>					
13. SUPPLEMENTARY NOTES <b>Presented at the 2012 Science, Technology &amp; Requirements Forum held 17-18 October in Fort Leonard Wood, MO.</b>					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT <b>Same as Report (SAR)</b>	18. NUMBER OF PAGES <b>31</b>	19a. NAME OF RESPONSIBLE PERSON
a. REPORT <b>unclassified</b>	b. ABSTRACT <b>unclassified</b>	c. THIS PAGE <b>unclassified</b>			

## ✓ **SBIR & STTR Programs Overview**

- ✓ Three-Phased Programs
- ✓ Key Features, Requirements, & Eligibility
- ✓ Agency Participation and Funding
- ✓ DoD SBIR & STTR Administration & Reporting
- ✓ Cyclic Activities – Topics, Solicitations, Proposals
- ✓ Transition & Commercialization
- ✓ Summary & Resources

# Program Overview

The logo for the Agency for Research Libraries (ARL) features the letters 'ARL' in a bold, black, sans-serif font. Each letter has a yellow, triangular shape positioned above it, creating a stylized, modern look. The background of the slide is a dark red banner with a faint, light-colored world map and binary code (0s and 1s) overlaid on it.



**ARMY**



**SBIR**

**SMALL BUSINESS INNOVATION RESEARCH**

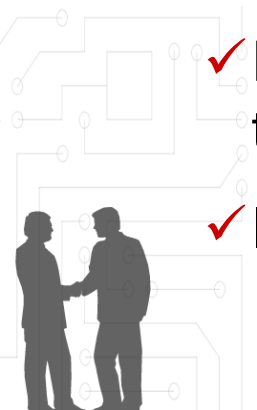


## The *Small Business Innovation Research (SBIR)* program:

- ✓ Requires each federal agency with an extramural for R&D over >\$100M to **set-aside 2.6%** for SBIR (**Army FY12 = \$182M**)

## The *Small Business Innovation Research* goals:

- ✓ Stimulate technological innovation
- ✓ **Increase small business participation in federally funded R&D**
- ✓ Foster participation by minority and disadvantaged firms in technological innovation
- ✓ Increase private sector commercialization of federal R&D



## *Small Business Technology Transfer*



- ✓ Requires each federal agency with an extramural for R&D over >\$1B to **set-aside 0.35%** for Army **STTR FY12 = \$24.7M**
- ✓ Offers the government a unique opportunity to engage small technology **businesses** partnered with **research institutions**

# Three-Phased Process





## SBIR

## STTR

### Phase I

Project feasibility

6 months

up to \$150,000

9 months

up to \$150,000

### Phase II

Project development  
to prototype

2 years

up to \$1,000,000

2 years

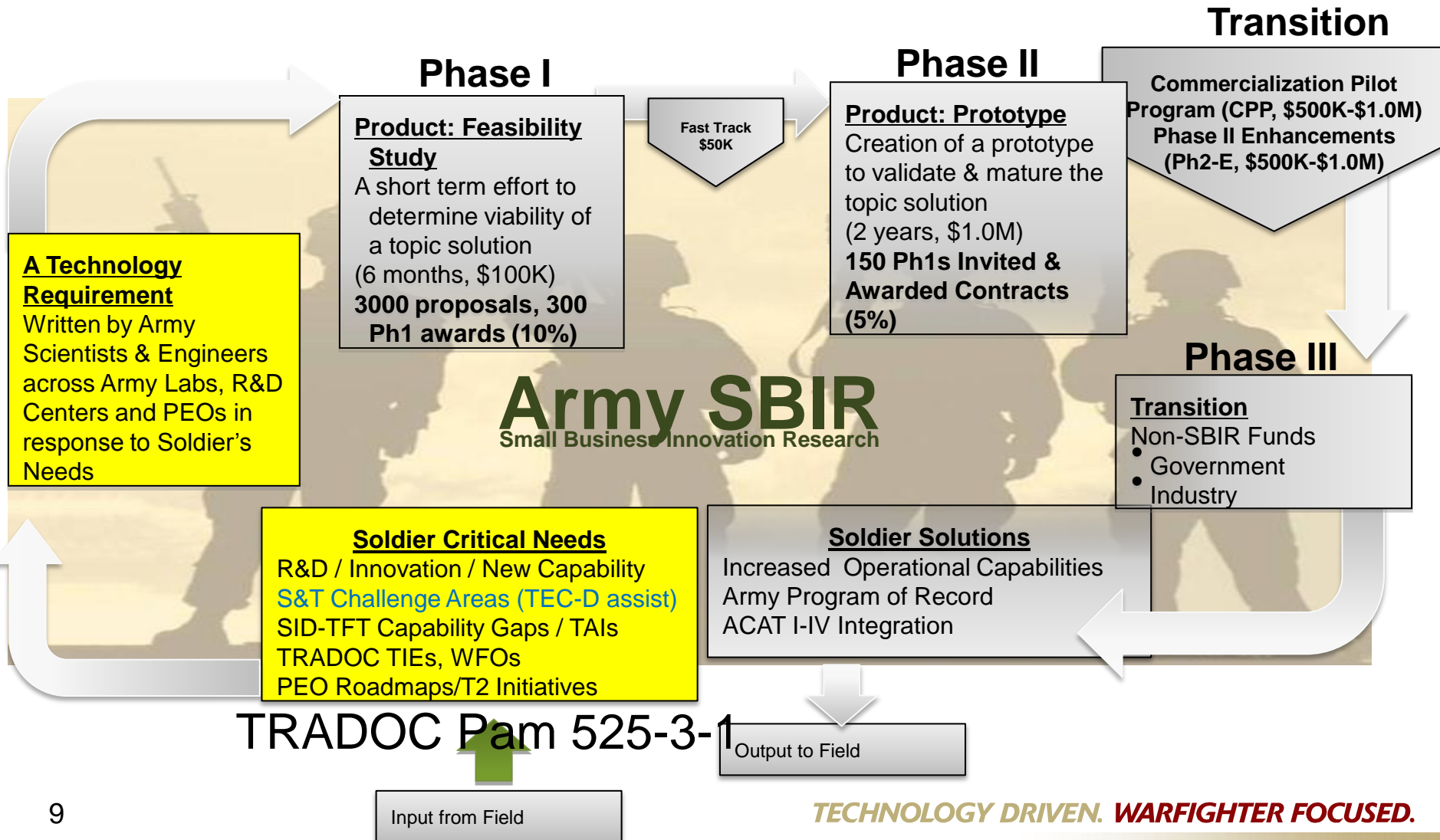
up to \$1,000,000

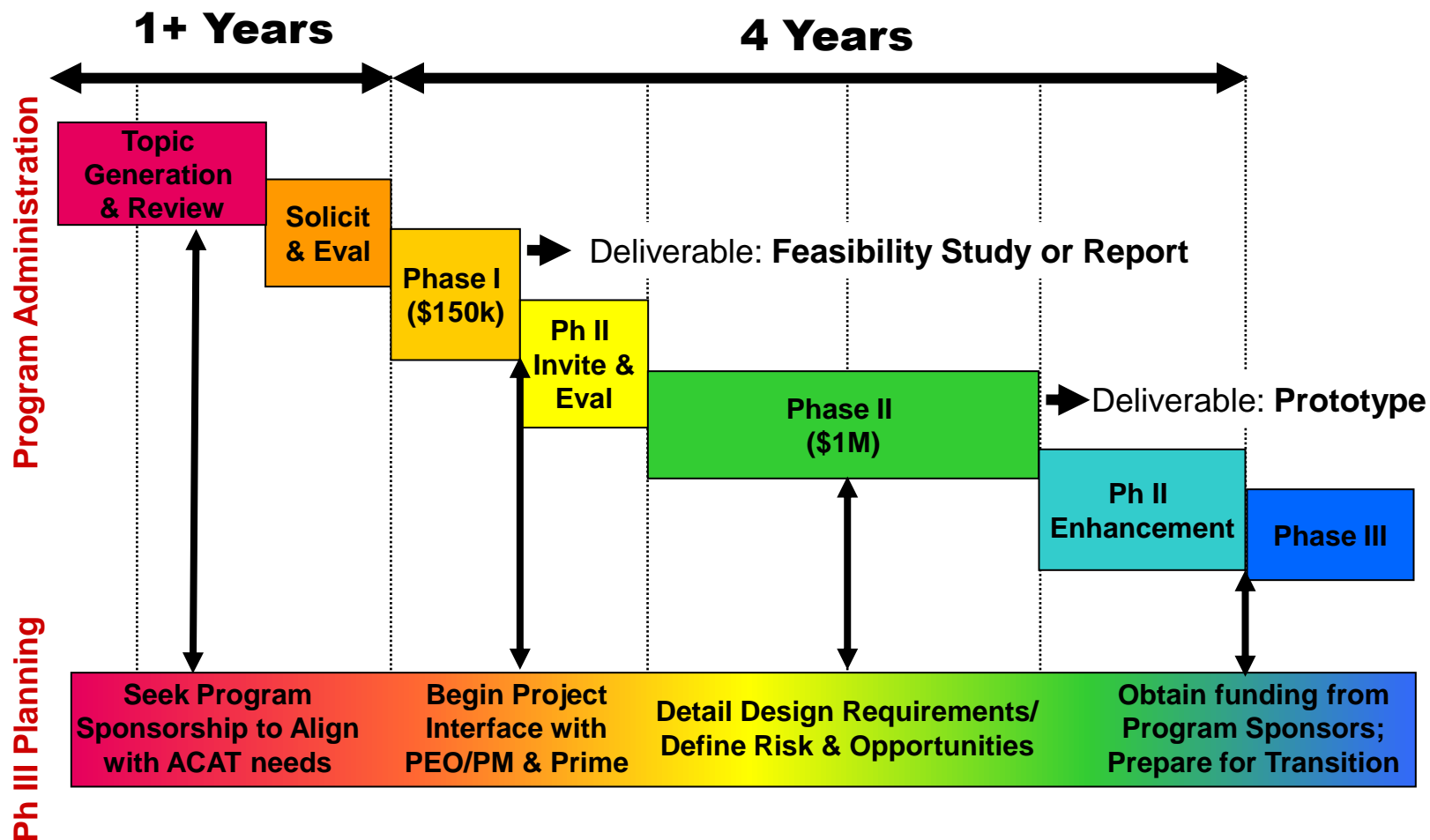
### Phase III

Commercialization

Commercialize, with non-SBIR/non-STTR funds, the  
technology in military and/or private sector markets

**Transition** is technology maturation from SBIR investment to Non-SBIR government and/or commercial investment and ultimately into the hands of our Soldiers.

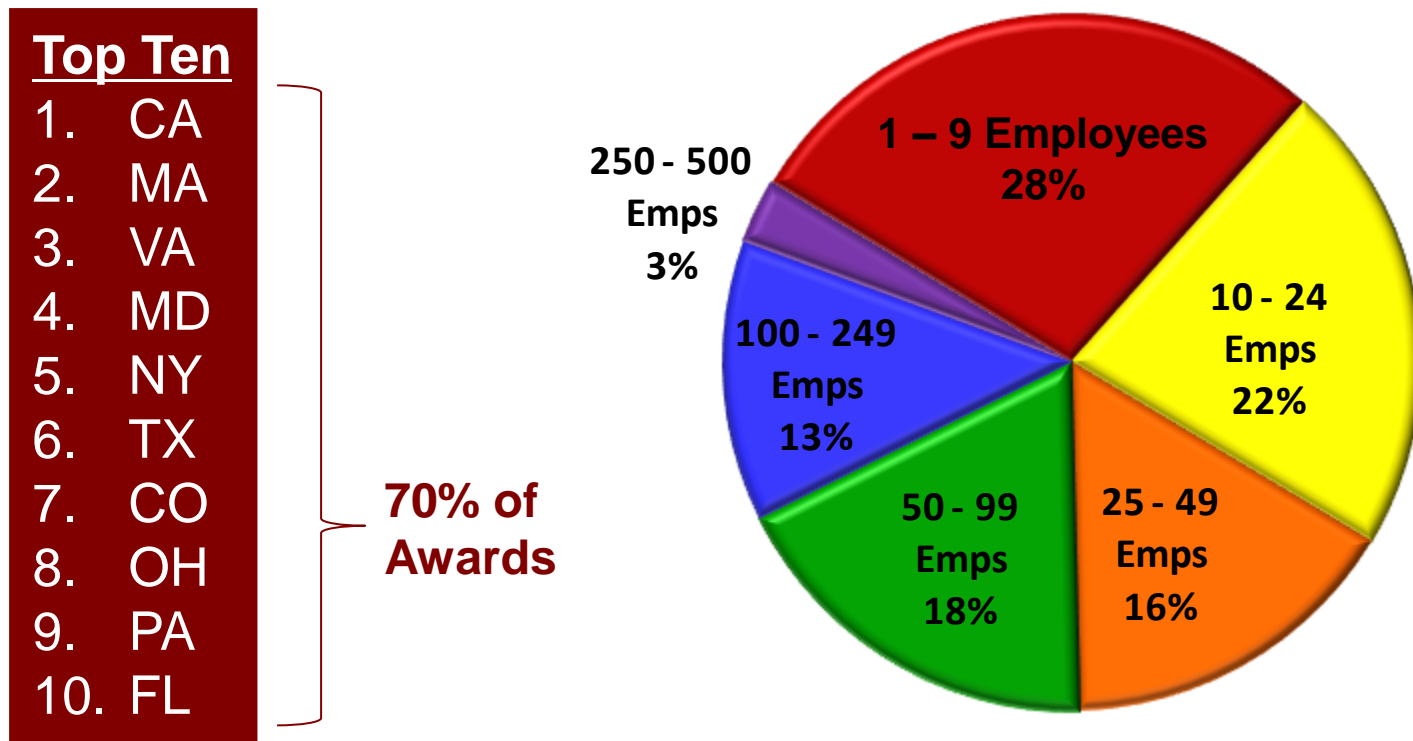




# Key Features, Requirements, & Eligibility



- ✓ Small hi-tech firms from across the country
- ✓ 2/3 of applicants have fewer than 50 employees





# Agency Participation & Funding





## SBIR + STTR Programs:



Dept. of Defense



Dept. of Health and  
Human Services



Dept. of Energy



National Aeronautics  
and Space  
Administration



Dept. of Homeland  
Security



National  
Science  
Foundation

## SBIR Program only:



Dept. of Agriculture



Dept. of Education



Dept. of  
Transportation



Environmental  
Protection Agency



Dept. of Commerce



## SBIR + STTR Programs:



Air Force



Army



Navy



Office of Secretary of  
Defense



Defense Advanced  
Research Projects  
Agency



Missile Defense  
Agency

## SBIR Program only:



Defense Threat  
Reduction Agency



Joint S&T Office for  
Chemical and  
Biological Defense



National Geospatial  
Agency



Special Operations  
Command

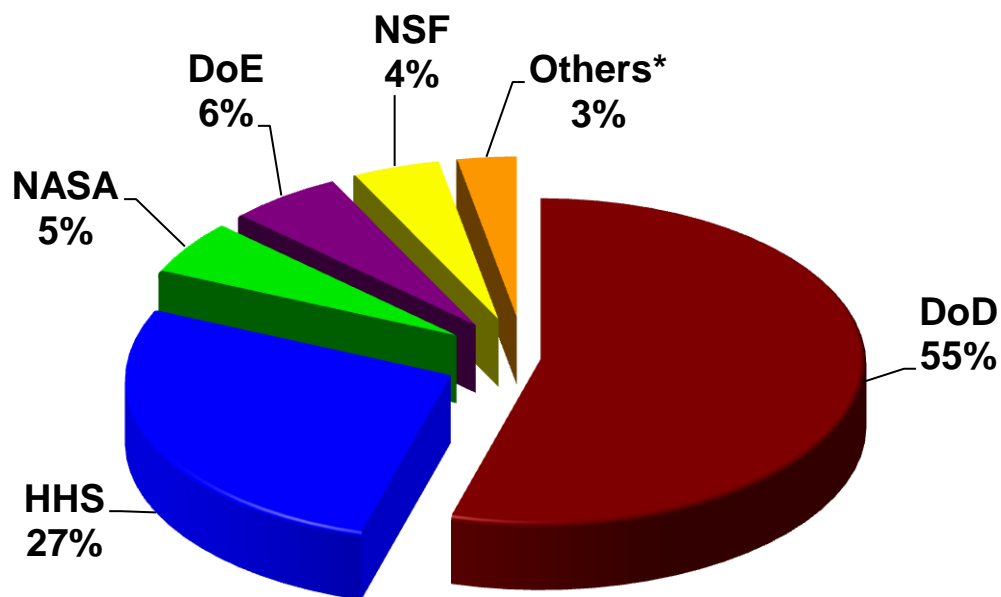


Defense  
Microelectronics  
Activity



Defense Logistics  
Agency

	DOD	NASA	DOT	EPA	DOC	DHS	DOE	NSF	USDA	DoED	HHS
SBIR	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
STTR	✓	✓					✓	✓			✓
Contract/Grant	C	C	C	C	C	C	G	G	G	G/C	G/C



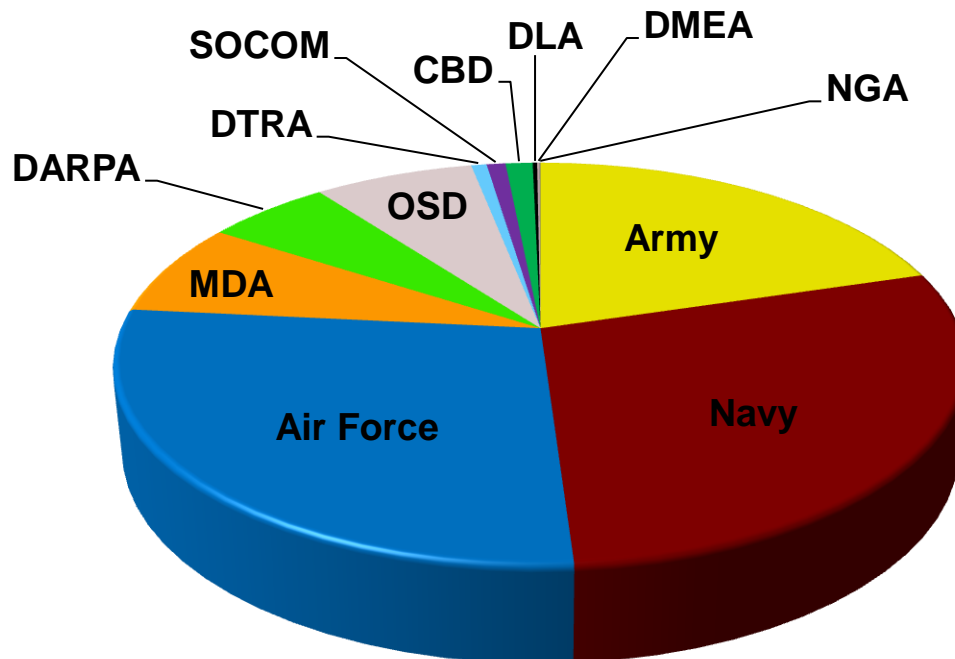
✓ Small Business Administration (SBA) oversees the federal SBIR/STTR programs

- **Policy Directive**
- **Congressional Report**
- **Size determination Waivers**

	Army	Navy	AF	MDA	DARPA	OSD	DTRA	SOCOM	CBD	DLA	DMEA	NGA
SBIR (FY12 \$M)	\$244.4 (\$182)	\$342.6	\$331.3	\$90.3	\$67.3	\$86.2	\$8.3	\$10.2	\$14.6	\$2.4	\$1.3	\$0.5
STTR (\$M)	\$29.3 (\$24.7)	\$41.1	\$39.8	\$10.9	\$8.1	\$6.0						

## DoD FY10 Budgets

- SBIR: \$1.2B
- STTR: \$135M
- ✓ OSD/OSBP oversight of Component SBIR/STTR programs



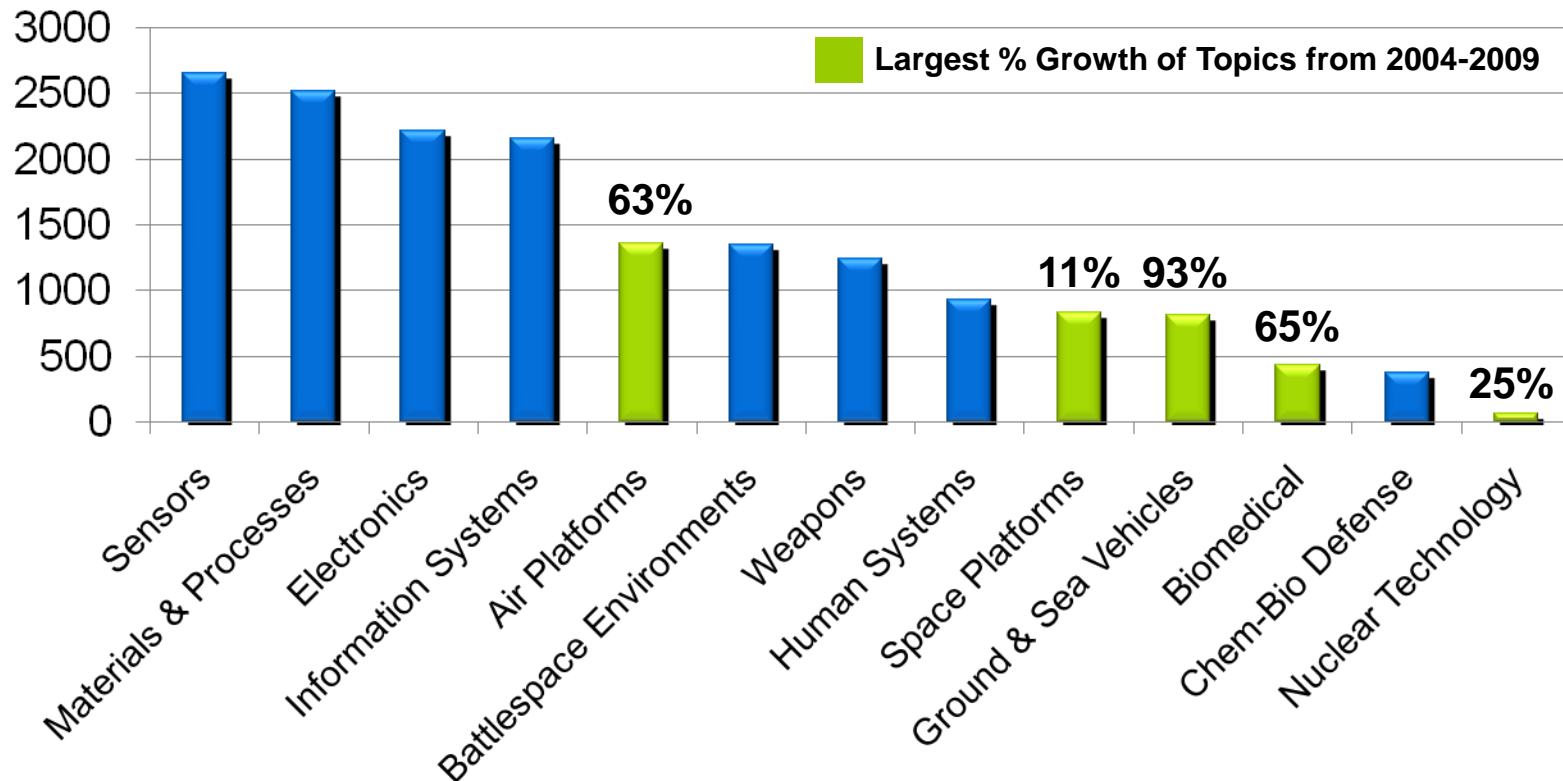
NGA is not required to have a SBIR program but participates voluntarily



# DoD Administration & Reporting



- ✓ Address a DoD Key Technology Area
- ✓ Tend to have narrow focus rather than broad



# DoD SBIR/STTR Solicitations





FY13	Open	Close	Participating Components
SBIR 13.1	17Dec12	16Jan13	Army, Navy, CBD, DARPA, DTRA, OSD, SOCOM
SBIR 13.2	24May13	26Jun13	Army, Navy, Air Force, DARPA, DTRA, MDA, OSD, NGA
SBIR 13.3	26Aug13	25Sep13	Army, Navy, DARPA, OSD
STTR 13.A	25Feb13	27Mar13	Army, Navy, MDA
STTR 13.B	26Aug13	25Sep13	Air Force, MDA

- ✓ 3 SBIR and 2 STTR DoD solicitations
- ✓ Identify 900 topics
- ✓ Attract 15,000 proposals

**FY12 Army Topics = 119 SBIR + 30 STTR**

SBIR and STTR proposals are evaluated on:

- ✓ Soundness, **technical merit**, and innovation of proposed approach and its incremental progress toward topic or subtopic solution
- ✓ **Qualifications** of the firm and team to perform R&D and commercialize results
- ✓ Potential for **commercial application** — government or private sector

- Same criteria used for Phase I and II
- Weighting determined by the Component

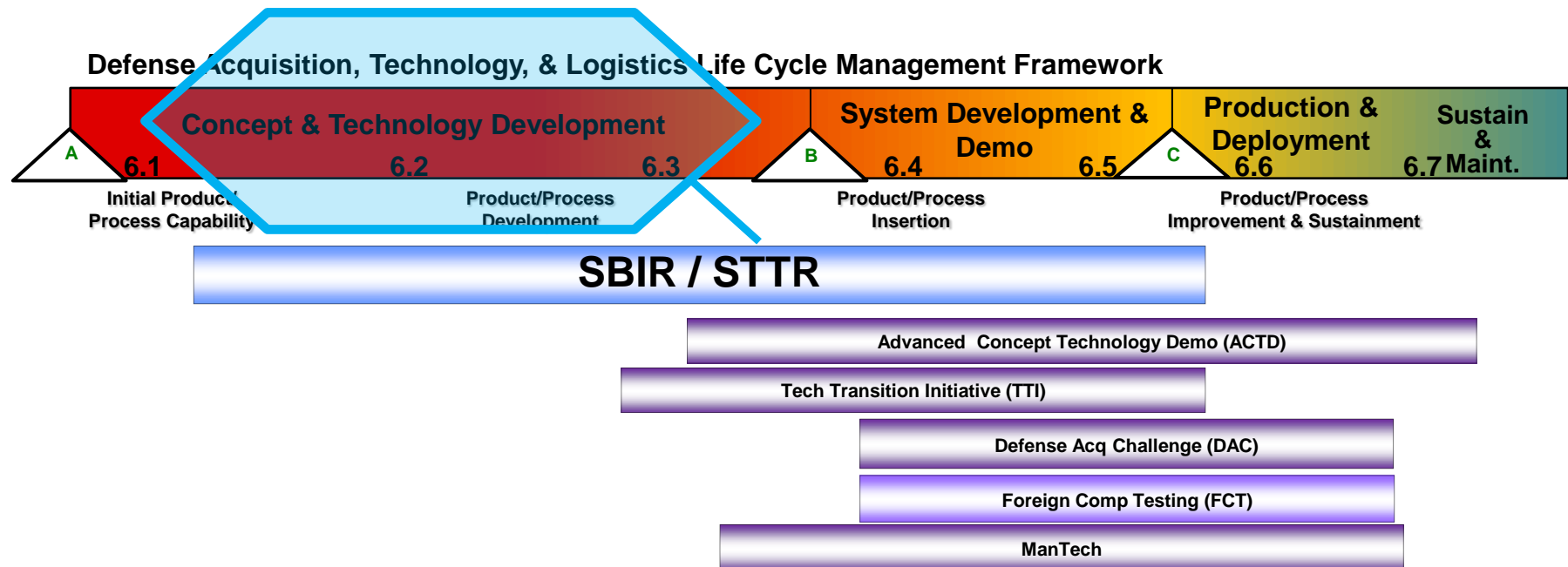




# Transition & Commercialization



- ✓ SBIR/STTR invests earlier & funds more than other R&D programs
- ✓ Spans broad spectrum of acquisition lifecycle and RDT&E categories
- ✓ Opportunities for Leap Ahead, Risk Mitigation, Enabling Technology



# Summary & Resources



<b>FY13</b>	<b>SBIR</b>	<b>STTR</b>
Set-Aside	2.6%	0.35%
Extramural R&D	>\$100M	>\$1B
Federal Agencies	11	5
DoD Components	12	6
Participants	Small Business	Small Business + Research Institute
DoD Solicitations	3 annually	2 annually
Phase I	\$150K, 6 months	\$150K, 6+ months
Phase II	\$1M, 2 years	\$1M, 2 years



- 1) Largest source of early stage R&D funds
- 2) No strings attached
- 3) Follow-on Phase III awards can be sole sourced
- 4) Company may maintain ownership of equipment
- 5) Builds credibility with government contracting



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✓ **Navy**  
John Williams  
703-696-0342

✓ **Air Force**  
Gus Vu  
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✓ **DTRA**  
Robert Swahn  
703-767-2915

✓ **MDA**  
Doug Deason  
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✓ **DARPA**  
Susan Nichols  
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✓ **OSD**  
Teresa Puretz  
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✓ **CBD**  
Larry Pollack  
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✓ **NGA**  
Stephen Sturtz  
571-557-2715

✓ **DMEA**  
Kevin Rankin  
916-231-1644

✓ **DLA**  
Natalie Seiling  
804-279-5120

✓ **SOCOM**  
Shawn Patterson  
813-826-1176

## ✓ Help Desk (8am – 5pm ET M-F)

- Phone: 866-SBIRHLP
- Email: [www.dodsbir.net/helpdesk](http://www.dodsbir.net/helpdesk)

## ✓ Websites

- [www.acq.osd.mil/osbp/sbir](http://www.acq.osd.mil/osbp/sbir)
- [www.dodsbir.net](http://www.dodsbir.net)

## ✓ Tutorial

- 30 minute on-line tutorial on how to prepare and submit a proposal available at [www.dodsbir.net](http://www.dodsbir.net)

## ✓ ListServ

- DoD maintains an email broadcast service to announce opportunities. Subscribe at [www.dodsbir.net](http://www.dodsbir.net)





## Summary of 2011 SBIR/STTR Reauthorization Act

### Section 5101 – Extension of Termination Dates

- SBIR/STTR Programs are extended until 30 September 2017.

### Section 5102 – SBIR and STTR Allocation Increase

- SBIR allocation increases 0.1% annually beginning in FY12 through FY16. In FY17 it increases by 0.2% (currently no increases scheduled after FY17).
- STTR allocation increases 0.05% every two years beginning in FY12 through FY16.

### Section 5103 – SBIR and STTR Award Levels

- SBIR/STTR Phase I awards increased to \$150,000, and Phase II awards increased to \$1,000,000.
- SBA will adjust levels annually for inflation.
- Awards may not exceed established award level by more than 50%, unless a waiver is obtained.

### Section 5104 – Agency and Program Flexibility

- A firm may receive a Phase II award from an agency that is not the one that awarded their Phase I award.
- A firm may receive a Phase II award under a program that is not the one that they received their Phase I award under.

### Section 5105 – Elimination of Phase II Invitations

- Invitation, pre-screening and pre-selection processes are no longer permitted for Phase II proposal submission.

### Section 5106 – Pilot to Allow Phase Flexibility

- Authorized to establish a Pilot Program that will allow for a Phase II award to be made without regard to whether or not the firm received a Phase I award.

### Section 5107 – Participation by VC Firms

- Firms majority-owned by venture capital operating companies, hedge funds and private equity are now included in the SBIR program.

### Section 5108 – Special Acquisition Preference

- Federal agencies and prime contractors shall issue Phase III awards to the greatest extent practicable.

### Section 5109 – Collaborating with Federal Labs

- No waiver is required for partnership with Federal Labs and Centers.

### Section 5110 – Notice Requirement

- Federal agencies must notify SBA of all court cases related to the SBIR/STTR Programs.

### Section 5111 – Additional SBIR/STTR Awards

- Firms are eligible to receive one additional Phase II award for continued work.

### Section 5121 – Technical Assistance for Awardees

- The amount allocated for Technical Assistance for awardees is increased to \$5,000.
- Phase II and STTR awards now included (Also \$5,000).

### Section 5122 – CRP at DoD

- The Commercialization Pilot Program is no longer a pilot, and is called the Commercialization Readiness Program.
- Program is extended to STTR.

### Section 5123 – CRP at Other Agencies

- Establishes commercialization programs at other Federal Agencies

### Section 5124 – Interagency Policy Committee

- The Director of the Office of Science and Technology Policy will establish an Interagency SBIR/STTR Policy Committee.

### Section 5125 – Definition of Phase III

- Phase III is work that derives from, extends or completes efforts made under prior SBIR/STTR funding agreements.

### Section 5126 – Shortened Award Decision Period

- Selections must be made within 90 days of the solicitation close.

### Section 5127 – Phase O Proof of Concept

- NIH may use \$5 million of the funds to establish a Proof of Concept Partnership pilot program.

### Section 5131 – Streamlining Annual Evaluation

- There are additional annual reporting requirements.
- Data will be shared electronically between the Federal Agencies.

### Section 5132 – SBIR Data Collection from Agencies

- There are additional data requirements.

## FY 13.A ARMY STTR Phase I Solicitation Schedule

TOPIC PRERELEASE AND FEDBIZOPPS ANNOUNCEMENT	25 JAN 2013
SOLICITATION OPENS (BEGIN ACCEPTING PROPOSALS)	25 FEB 2013
SOLICITATION CLOSES - PHASE I PROPOSALS DUE (NLT 6 AM)	27 MAR 2013
REVIEW AND EVALUATION	APR - JUNE 2013
ANNOUNCEMENT OF FY13.A ARMY STTR PHASE I SELECTIONS	MID-JUNE 2013
PHASE I FY13 CONTRACTS AWARDED	LATE-JULY 2013

## FY12.A ARMY STTR Topics (Open Solicitation 27 Feb 2012)

Sol. Topic #	Title
A12a-T001	Passive Wireless Corrosion-Monitoring Tags
A12a-T002	Formalism for Millimeter-Wave Modeling of RADAR Cross Sections
A12a-T003	Real Time 3-D Modeling and Immersive Visualization For Enhanced Soldier Situation Awareness
A12a-T004	Manufacturing Process Optimization of Ultrasonic Bonding of Metallic Composites
A12a-T005	On Demand Energy Activated Liquid Decontaminants and Cleaning Solutions
A12a-T006	Virtual Laboratory of Aggregate Behavior
A12a-T007	Compressive Sampling Video Sensor for Change Detection
A12a-T008	Wide Temperature Range, High-Speed Optical Interconnect Technology
A12a-T009	Extracting Meaning in Social Media
A12a-T010	Development of Low Temperature Ultracapacitor
A12a-T011	Nanostructured Electrode Materials for Enhanced Biological Charge Transfer
A12a-T012	Mesh Generation and Control for Moving Boundary Problems
A12a-T013	Nondestructive Concrete Characterization System
A12a-T014	High Performance Planar Semiconductor Gas Sensors
A12a-T015	Battlefield Ultrasound with Automated Applications
A12a-T016	Non-Linear Laser Wave Mixing for Trace Detection of Explosives
A12a-T017	Strain-Modulated Diamond Nanostructures for Next-Generation, Biocompatible Nanoelectromechanical Systems
A12a-T018	High Throughput Forensic Palynology
A12a-T019	High Quality AlGaIn Epitaxial Films with Reduced Surface Dislocation Density
A12a-T020	Atomic Layer Deposition of Lead Zirconate Titanate Thin Films for PiezoMEMS Applications
A12a-T021	Sub-Wavelength THz-Frequency Spectrometer for Trace Materials Analysis
A12a-T022	Micro-Machined THz Probes for Electronic Analysis of Integrated Structures
A12a-T023	Narrowband Perfect Absorber for Infrared Sensing
A12a-T024	Engineering and Development of Anisotropic Conductive Polymer Nanomaterials for Visible, Infrared and Bi-Spectral Obscure Applications
A12a-T025	Preserving Navigation Access for the Warfighter – Development of an Acoustic Marine Life Watch System to Support Corps Channel Maintenance and Enhancement Activities
A12a-T026	Industrial Production Methods for Ultra-High Strength Carbon Nanotube-Based Fibers
A12a-T027	Development of a Subunit Vaccine for Prevention of Diseases Caused by Streptococcus Pyogenes Infection
A12a-T028	DNA Vaccine Technology to Rapidly Produce Cocktails of Polyclonal Antibodies to Neutralize Lethal Viruses of Military Importance
A12a-T029	Naturalistic Neurocognitive Assessment using Mobile Gaming Platforms
A12a-T030	Landmark Navigation for Unmanned Ground Vehicles

## FY-12 PROGRAM STATISTICS

### Army STTR Budget:

\$24.7 M / 30 Topics / 427 Phase I Proposals / 72 Phase II Proposals / 56 Phase I Awards / 29 Phase II Awards



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## OUR MISSION

Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs allow small, high-tech U.S. businesses (less than 500 employees) and academia the opportunity to provide innovative research and development solutions in response to critical Army needs. By capturing the tremendous and agile talents of the U.S. small business community, the SBIR and STTR programs benefit the Department of Defense (DoD), the private sector, and our national economy. This portal provides all the information necessary to participate in these programs.

### 13.1 PHASE I SCHEDULE

**13.1 Solicitation Pre-Release:** 16 November 2012 - 16 December 2012

**13.1 Solicitation Opens:** 17 December 2012

**13.1 Solicitation Closes:** 16 January 2013

### Upcoming Events

Annual UAHuntsville PTAC Business Matchmaker  
October 18, 2012  
Huntsville, AL

2012 SBIR/STTR National Conference

## <https://www.armysbir.army.mil/>